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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,453	12/17/2001	Gyula Vigh	99004/02U/TL	2271

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EXAMINER

ANTHONY. JOSEPH DAVID

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/023,453

Applicant(s)

VIGH, GYULA

Examiner

Joseph D. Anthony

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 1-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 18-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-13, drawn to a composition, classified in class 252, subclass 1.
 - II. Claims 14-18, drawn to an analytical system, classified in class 422, subclass 80
 - III. Claims 19-21, drawn to a method of combusting a sample in a buffer composition, classified in class 436, subclass 160.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used as a surfactant in a detergent composition.

3. Inventions III and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed could be use to destroy toxic waste products.

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4. Inventions I and II are patentable distinct since Group I is drawn to a composition and Group II is drawn to an apparatus in which the composition may be placed. It is obvious to one having ordinary skill in the art that these inventions are distinct from each other. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with Robert W. Strozier on 03/02/04 a provisional election was made with traverse to prosecute the invention of Group III, claims 19-21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-18 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 19-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Independent claim is indefinite because the metes and bounds of what is meant by "a weak acid" is unclear.

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 19-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 19-23 of copending Application No. 10/146,475. Although the conflicting claims are not identical, they are not patentably distinct from each other because the anions of the copending application read on applicant's weak acid when in solution, and the counterions of the copending application reads on applicant's cations when in solution.

11. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. Claims 19-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 19-23 of copending Application No. 10/146,476.

Although the conflicting claims are not identical, they are not patentably distinct from

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each other because the cations of the copending application read on applicant's cations when in solution, and the counterions of the copending application reads on applicant's weak acid when in solution.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims Free of Prior-Art Rejections

12. Elected claims 19-21 are deemed to be free of any prior-art rejections. The closest pieces of prior-art are deemed to be as followed:

A) Abubaker et al. U.S. Patent Number 5,888,363. Abubaker et al teaches an apparatus and method for interfacing a capillary with a detector is disclosed. In particular, a capillary that is used in a capillary electrophoresis technique is interfaced with an off-column detector that is destructive of the sample or that will otherwise create adverse affects on the operations of the capillary electrophoresis. By way of example only, a nitrogen chemiluminescent detector using pyro-chemiluminescent techniques is discussed. **The circuit between the electrodes is completed through capillary tube by an ionic buffer solution that fills the capillary. This solution may be any ionic buffer. An example of this invention using a solution consisting of 0.3% sodium borate and 0.4% boric acid in water is presented herein.** The results of this example are presented graphically as FIGS. 4a, 4b and 4c. An interface between the separation and detection systems is essential to prevent interference between the two systems, see abstract, column 5, lines 12-35 and column 7, lines 20-34. Applicant's

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claimed process et al. is deemed to be patentable distinct from Abubaker et al's claimed process because Abubaker et al has absolutely no disclosure to applicant's particularly claimed buffer composition to which the sample to be analyzed is added to, see applicant's claim 19. On the contrary, the buffer composition illustrated by Abubaker et al. teaches directly against applicant's claimed buffer composition since it contains the metal sodium, from sodium borate, wherein applicant's buffer composition of independent claim 19 is "metal-atom free".

B) U.S. Patent Numbers to 5,968,338, 6,368,485, 5,260,475, 5,777,151, 6,508,940, and 5,733,661 all suggest forming salts of an organic carboxylic acid or carbonic acid, wherein the cation of the salt is a sulfonium ion; see abstract and column 6, line 54 to column 7, line 24 of 6,368,485; see abstract and claim 19 of 5,260,475; see abstract, and column 12, lines 58-65 of 5,777,151; see abstract of 6,508,940; and see abstract and column 4, lines 28-47 of 5,733,661.

Of the above patents, Hulme et al. U.S. Patent Number 5,968,338 is especially noteworthy. Hulme et al teaches in one embodiment, a process for recovering an onium hydroxide from a solution containing an onium compound, including contacting the solution with a cation exchange material so that at least a portion of onium cations from the onium compound are adsorbed by the cation exchange material; **contacting an acid with the cation exchange material to elute an onium salt**, charging the onium salt to an electrochemical cell containing at least three compartments, a cathode, an anode, and in order from the anode to the cathode, a bipolar membrane and a cation selective membrane,

and passing a current through the cell whereby the onium hydroxide is regenerated; and recovering the onium hydroxide from the cell, see abstract.

Preferred onium hydroxides that are to be recovered according to the invention are the tertiary sulfonium hydroxides of formula (IV), see

column 6, lines 1-38. Hulme et al further teaches in column 9, lines 5-35 the

following: "The selection of acid for use in the eluting step is determined in

accordance with the identity of the cation exchange material, the identity of the

onium cation, and in relation to the step involving an electrochemical cell. The

acid may be selected from inorganic acids such as hydrochloric acid,

hydrobromic acid, nitric acid, sulfuric acid, **carbonic acid**, phosphoric acid,

phosphorous acid and the like and **organic acids such as acetic acid, formic acid, oxalic acid and the like.** In one embodiment, the acid has a **PK.sub.a**

of less than about 5, and preferably a PK.sub.a of less than about 4. The

concentration of the acid may vary broadly, and it may be selected from a broad

range from above about 0.01% to above about 20%. The acid is preferably an

inorganic acid. In particular, more **preferred is carbonic acid**, hydrochloric acid

or a diluted sulfuric acid having a concentration from above about 0.05% or

above about 2.0%.

An acid is contacted with the cation exchange material thereby eluting an onium salt. The onium salt eluted from the cation exchange material is at least partially constituted by a compound containing an onium cation (derived from the onium hydroxide and/or onium salt in the solution initially contacted with the

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cation exchange material) and an anion (derived from the acid contacted with the cation exchange material).

The onium salts eluted include salts constituted by the onium cation and any of the corresponding acid anions listed above. Specific typical examples include at least one of an onium bicarbonate, an onium chloride, an onium bromide, an onium nitrate, an onium phosphate, an **onium formate, an onium acetate** and an onium sulfate, **or any salt corresponding to any of the acid anions inherently listed above.**"

Please note that the examiner holds that the when the aqueous onium salt elutes, are a **tertiary sulfonium salt of either an organic acid or of a carbonic acid**, the elute is in fact a buffer solution that reads on applicant's disclosed buffers, even though Hulme et al does not call the elute a buffer solution. In any case, Hulme et al. U. S. Patent Number 5,968,338, has absolutely no disclosure or suggestion, to use said aqueous elute as a buffer composition in applicant's claimed process of independent claim 19 or in the taught process of Abubaker et al. U.S. Patent Number 5,888,363 which has been described above. As such, there is absolutely no motivation to combined Hulme et al disclosure with Abubaker et al disclosure to come up with applicant's claimed process.

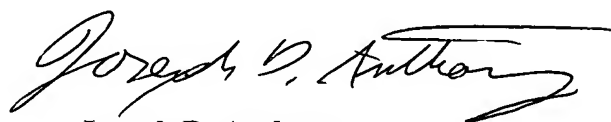
Likewise, there is also no disclosure or suggestion to use the onium salts as disclosed by 6,368,485, 5,260,475, 5,777,151, 6,508,940, and 5,733,661 in the process taught by Abubaker et al..

Prior-Art Cited But Not Applied

13. Any prior-art reference which is cited on FORM PTO-892 but not applied, is cited only to show the general state of the prior-art at the time of applicant's invention.

Examiner Information

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Joseph D. Anthony whose telephone number is (571) 272-1117. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (571) 272-1119. The centralized FAX machine number is (703) 872-9306. All other papers received by FAX will be treated as Official communications and cannot be immediately handled by the Examiner.



Joseph D. Anthony
Primary Patent Examiner
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2/25/05